

Svetlana SV6L6GC High Performance Audio Beam Power Tetrode

The Svetlana SV6L6GC is a glass envelope beam-power tetrode intended for high-power audio amplifier service. Close manufacturing specification tolerances and improved processing provide improved reliability and superior sonic performance. The Svetlana SV6L6GC is manufactured in the Svetlana factory in St. Petersburg, Russia, and is designed to be a direct replacement for any 6L6 type.

The Svetlana SV6L6GC features:

- Design and construction based on the Sylvania 6L6GC/STR387
- Extra-rugged construction for use in music amplifiers--thick mica spacers and extra bracing reduce microphonic effects and resist mechanical and thermal shocks
- Increased peak cathode emission from new cathode materials
- Gold-plated grid and extended processing and aging for stability and reliability
- Tri-plate anode for superior dissipation
- Precise grid/screen alignment
- Comprehensive static and audio amplifier testing before and after aging
- May be operated in inverted position--base fits into socket clamps in Fender guitar amplifiers

General Characteristics

	min	typ	max	
Heater Voltage (AC or DC)	*5.7*	*6.3*	*6.9*	*V*
Heater Current @6.3V		*0.9*		*A*
Cathode:			*oxide-coated, unipotential*	
Cathode-to-heater potential			*±200*	*V*
Direct interelectrode capacitances :				
Grid no. 1 to plate			*0.6*	*pF*
Grid no. 1 to cathode, heater, grid no. 2, and beam forming plates			*10*	*pF*
Plate to cathode, heater, grid no. 2, and beam forming plates			*6.5*	*pF*

Mechanical

Operating position	*Any*
Base	*Large wafer octal 8-pin*
Basing diagram	*JEDEC 7AC*
Cooling	*Radiation and convection*
Envelope temperature (max)	*250 C*
Nominal dimensions:	
Diameter	*38.8mm (1.528 in.)*
Base to top	*93mm (3.605 in.)*
Overall height	*108mm (4.252 in.)*
Diameter of base	*34mm (1.339 in.)*
Net weight	*65 grams*

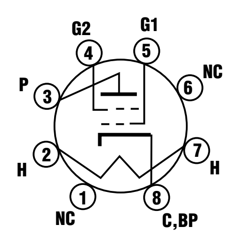
Maximum ratings

DC plate voltage VP	*500*	*V*
Screen grid voltage Vg2	*500*	*V*
Plate Dissipation	*30*	*W*
Screen Grid Dissipation	*5*	*W*

Svetlana SV6L6GC Outline drawing



Base pin connections bottom view



Svetlana ELECTRON DEVICES SM

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ELECTRON DEVICES

Typical Operation, Class A, Audio Power Amplifier, Single Tube Connection

	tetrode	triode	
DC plate voltage	350	250	V
Screen grid voltage	250		V
Control grid bias voltage	-18	-20	V
Peak AF grid voltage	18	20	V
Zero-signal plate current	54	40	mA
Maximum-signal plate current	66	44	mA
Zero-signal screen grid current	2.5		mA
Maximum-signal screen current	7		mA
Plate resistance (approx)	33000	1700	ohms
Transconductance (approx)	5200	4700	µS
Load Resistance	4200	5000	ohms
Total harmonic distortion	15	5	%
Maximum signal power output	10.8	1.4	W

Typical Operation, Class AB_1, Audio Power Amplifier (Values for two tubes)

DC plate voltage	450	V
Screen grid voltage	400	V
Control grid bias voltage	-37	V
Peak AF grid-to-grid voltage	70	V
Zero-signal plate current	116	mA
Maximum-signal plate current	210	mA
Zero-signal screen grid current	5.6	mA
Maximum-signal screen current	22	mA
Load Resistance, plate-to-plate	5600	ohms
Total harmonic distortion	1.8	%
Maximum signal power output	55	W

